

Claims

1. Gear mechanism (10), in particular for adjusting moveable parts in a motor vehicle, comprising a spur wheel (14) which is provided with external teeth (16) and meshes with an internal gear (18) that is provided with internal teeth (20), wherein the number of internal teeth (20) to generate a certain gear step-up ratio is greater by at least one than the number of external teeth (16) and the spur wheel (14) and the internal gear (18) perform an eccentric movement relative to one another, characterized in that the eccentric movement is directed by means of the matching tooth geometry of the internal and external teeth (20, 16).
2. Gear mechanism (10) according to Claim 1, characterized in that the spur wheel (14) is coupled with a drive element (12, 32) rotating around an axis (28) or a driven element (26, 33), wherein the coupling (30, 34) is embodied to be radially flexible vis-à-vis the axis (28).
3. Gear mechanism (10) according to one of Claims 1 or 2, characterized in that the internal gear (18) is coupled with a drive element (12, 32) rotating around the axis (28) or a driven element (26, 33), wherein the coupling (30, 34) is embodied to be radially flexible vis-à-vis the axis (28).
4. Gear mechanism (10) according to one of the preceding claims, characterized in that the coupling (30) features an elastic element (34), in particular an elastomer, which is embodied to torsion-proof and radially moveable.
5. Gear mechanism (10) according to one of the preceding claims, characterized in that the spur wheel (14) is prevented from rotating around the axis (28) and the internal gear (18) is mounted so that it can freely rotate.
6. Gear mechanism (10) according to one of the preceding claims, characterized in that the spur wheel (14) is arranged so it can freely rotate and the internal gear (18) is arranged so that it is rotationally secured.

7. Gear mechanism (10) according to one of the preceding claims, characterized in that the driven element (26) is embodied as a carrier (42), which cooperates with meshing elements (38, 22) of the spur wheel (14).
8. Gear mechanism (10) according to one of the preceding claims, characterized in that the drive element (12) is formed by a motor shaft (32).
9. Gear mechanism (10) according to one of the preceding claims, characterized in that the spur wheel (14) is arranged rotatably on a bridge (44) of the drive element (12, 32) and meshes with two internal gears (46, 18) that are arranged axially vis-à-vis each other and have a different number of teeth.
10. Gear mechanism (10) according to one of the preceding claims, characterized in that the outside diameter (64) of the external teeth (16) is greater than the inside diameter (66) of the internal teeth (20).
11. Gear mechanism (10) according to one of the preceding claims, characterized in that the internal teeth (20) and the external teeth (16) are embodied as involute toothing (49) or cycloidal pinion tooth gearing (68).
12. Gear mechanism (10) according to one of the preceding claims, characterized in that the spur wheel (14) or the internal gear (18) is positioned so that it has free movement radially on a drive shaft (32) or a driven shaft (33).
13. Gear mechanism (10) according to one of the preceding claims, characterized in that the internal teeth (20) engage in the external teeth (16) in such a way that the spur wheel (14) is not radially displaceable vis-à-vis the internal gear (18).